

ABSTRACT

A flush valve system includes a sensor, a bias circuit, an electrical switch, a mechanical switch, and a flush valve. The bias circuit generates a bias signal when an activation signal is received from the sensor. The bias signal turns on the electrical switch. The mechanical switch turns on just before the electrical switch is turned off. The flush valve is coupled to the electrical and the mechanical switch to initiate fluid flow when the electrical switch is turned on and facilitate the flow until the mechanical switch is turned off. An automatic braking method includes receiving an actuation signal, actuating an electronic switch to initiate a rotation of a switch cam and the opening of a valve, actuating a mechanical switch when a cutout portion of the switch cam is in contact with a portion of the mechanical switch, and closing the valve when the portion of the mechanical switch is outside of the cutout portion.